DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: <u>04-0120F4</u>

Cty: <u>SF/ALA</u> Rte: <u>80</u> PM: <u>13.2/13.9</u>

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary Report No: WIR-014365
Address: 333 Burma Road Date Inspected: 18-May-2010

City: Oakland, CA 94607

Project Name: SAS Superstructure OSM Arrival Time: 700
Prime Contractor: American Bridge/Fluor Enterprises, a JV OSM Departure Time: 1900

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Location: Shanghai, China

CWI Name: CWI Present: Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

Bridge No: 34-0006 Component: OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

7DW+7CW

Shield Metal Arc Welding (SMAW) welding (VT repair) was performed at various locations on side plate t stiffeners located on the bottom plate of segment. Welder is identified as Mr. Zang Yanbo (045196). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-Repair-1.

8BW

Flux Core Arc Welding (SMAW) welding was performed on weld joint 005 located at CA049 counter weight side of segment. Welder is identified as Mr. Wang Bing (048696). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2232-Tc-U4b-F.

8BW

WELDING INSPECTION REPORT

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Flux Core Arc Welding (FCAW) welding was performed on weld joint 005 located at CA053 counter weight side of segment. Welder is identified as Mr. Wang Bing (048696). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2232-Tc-U4b-F.

8BW+8CW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 020 located at BP095-001 bottom plate of segment. Welder is identified as Mr. Ji Yi (045268). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2213-B-U2-FCM-1.

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 044~048 located at SP130-001 side plate stiffeners counter weight of segment. Welder is identified as Mr. Ji Yi (045268). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 049~054 located at SP130-001 side plate stiffeners counter weight of segment. Welder is identified as Mr. Ji Yi (045268). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

8AW + 8BW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 004 located at OBW8 cross beam side of segment. Welder is identified as Mr. Wang Fupeng (205718). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-4G (4F)-Repair-1.

8CE

Flux Core Arc Welding (FCAW) welding was performed on weld joint 53 and 54 located at BP123-001 bottom plate of segment. Welder is identified as Mr. Zhang Hanming (220066). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2132.

9AE

Flux Core Arc Welding (FCAW) welding was performed on weld joint 013 and 014 located at BP124A-001 bottom plate of segment. Welder is identified as Mr. Zhang Hanming (220066). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2132.

Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions at Tail Assembly Yard. Locations and description of work are as followed:

WELDING INSPECTION REPORT

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8CE

- 1. UT reject excavation of LD weld joint LD003-001-010 was performed at panel point 50 cross beam side.
- 2. UT reject excavation of EP to DP weld joint CA054-004 was performed at bike path side of segment at Y location 6720mm.

NDT Observation

This QA Inspector observed ZPMC Magnetic Particle Testing (MT) Technician performed MT on various locations in the trial assembly yard. Locations and indications are as followed:

7DW+7EW

1. Bottom plate, side plate and deck plate stiffeners hold back welds.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (150-0042-2372), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer